

Abstract

Title: WIYN Open Cluster Study: A New Look at the Pleiades Lithium Problem

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For several years, the Pleiades cluster has been a cornerstone for studies on what lithium teaches us about the physical processes occurring in the stellar interiors of young solar-type stars. These processes include angular momentum transport and loss, and mixing. To this date, the origin of the large spreads in Li abundance and the correlation between Li and rotation rate remain a mystery. Armed with new membership information, we tackle this problem anew, by presenting and analyzing high signal-to-noise, high resolution (about 20, 000) WIYN/Hydra observations of Li in over 210 G, K, and M Pleiades dwarfs.

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